UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,422	09/01/1999	MANSOUR SAMADPOUR	MD9501	2597

31944 7590 10/02/2002

JOSEPH CHALVERUS, LAW OFFICE
LAKE CITY PROFESSIONAL CENTER
2611 N.E. 125TH STREET
SEATTLE, WA 98125

EXAMINER	
LU, FRANK WEI MIN	
ART UNIT	PAPER NUMBER
1634	

DATE MAILED: 10/02/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/380,422	SAMADPOUR, MANSOUR	
	Examiner	Art Unit	
	Frank W Lu	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☐ Notice of References Cited (PTO-892)
16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18)☐ Interview Summary (PTO-413) Paper No(s). _____ .
19)☐ Notice of Informal Patent Application (PTO-152)
20)☐ Other: .

DETAILED ACTION

Response to Amendment

1. Applicant's response to the office action filed on May 23, 2002 has been entered as Paper No:10. The claims pending in this application are claims 1-27. Rejection and/or objection not reiterated from the previous office action are hereby withdrawn.

Drawings

2. Applicant has got formal drawings filed on April 19, 2001 and these drawings have been approved by the office.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming subject matter which the applicant regards as his invention.

4. Claims 16-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The term "the lowest index " or "the highest index" in claim 16 is a relative term which renders the claim indefinite. The term "the lowest index" or " the highest index" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Response to Arguments

In pages 6-8 of applicant's remarks, applicant argued that " the limitations 'the lowest index' and 'the highest index' are not unbounded, vague, indefinite nor ambiguous. For an ordinary molecular microbiologist skilled in this art the terms 'index of diversity', 'the lowest index' and 'the highest index' are terms well defined and used to comparing isolates in two different groups.".

The argument has been fully considered but it is not persuasive toward the withdrawal of the rejection because, even applicant defined "index of diversity" in the specification (see specification, page 9), it is unclear how high an index can be called as "the highest index" and how low an index can be called as "the lowest index" since applicant did not define a range between "the highest index" and "the lowest index". An ordinary skilled in this art will have a problem to understand exact meaning of "the highest index" and "the lowest index".

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Preston *et al.,* (J. Clin. Microbiology, 32, 1427-1430, 1994) in light of GIBCO BRL Catalog (1992, page 318).

Preston *et al.,* teach genetic variability and molecular typing of *Shigella sonnei* strains isolated in Canada. In this study, restriction fragment length polymorphisms (RFLPs) of genomic DNAs from 49 clinical isolates of *Shigella sonnei* were analyzed by using a modified restriction endonuclease analysis procedure to investigate the genetic variability of this species. After cleavage with the restriction enzyme HaeIII or RsaI (4 base cutters as described in claims 11, 12, 16, and 21), DNA samples were electrophoresed in 5% polyacrylamide gels (16 cm long and considered as about 12 cm as described in claim 25) and the RFLP patterns were visualized by silver staining. The results showed that among 20 strains associated with sporadic cases of infection in three Canadian provinces, 15 distinct RFLP patterns were revealed by HaeIII digestion (the highest index of diversity from the unlinked isolates: 16/20=80%) and 12 distinct patterns were revealed by RsaI digestion (the lowest index of diversity from the unlinked isolates:13/20=65%). In contrast, the RFLP patterns of individual isolates within six groups of epidemiologically related isolates were identical to each other (the lowest index of diversity from the linked isolates are 9.1% (1/11) for RFLP pattern I, 8.3% (1/12) for RFLP pattern II, and 33.3% (1/3) for RFLP pattern III) but distinct from those of unrelated isolates (see abstract in page 1427, right column in column 1428, and Table 1 in page 1429). Note that polyacrylamide gel used by Preston *et al.,*could separated fragment in the 0.1 to 18 kb range as described in claim 1 (see Figure 2 in page 3181) since the range of Hae III digested genomic DNAs on the gel (see page 1428 and 1429, Figures 1 and 2) were from ~0.1 kb to 4.3 kb (see GIBCO BRL Catalog, page 318, 1992); and (2) the step (ii) in claim 16 was considered to be identical to the steps (iv) and (v) while the step (iii) was considered to be identical to the step (vi) here because the claim

does not require that the step (ii) must carry out before the steps of (iv) and (v) and the step (iii) must perform before the step (vi).

Therefore, Preston *et al.*,in light of GIBCO BRL Catalog teach all limitations recited by claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26.

Response to Arguments

In page 9, third paragraph bridging to page 10, second paragraph of applicant's remarks, applicant argued that "[T]he instant invention is not anticipated by the RFLP patterns described in the Preston reference;" since (1) "there is nothing in common between these methods."; (2) "[T]he improved MRF method described in the instant application that generates patterns having high differential power is an unanticipated advance over the Preston patterns." ; and (3) "[P]reston does not resolve the fragments using agarose gel electrophoresis, or PFEG." and "does not stain the fragments using ethidium bromide, propidim iodide, and fluorescent dyes.".

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. First, the examiner agreed with applicant that the reference of Preston *et al.,* was different from instant invention. However, the reference of Preston *et al.,* teach all limitations recited in claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, the examiner agreed with applicant that "[P]reston does not resolve the fragments using agarose gel electrophoresis, or PFEG." and "does not stain the fragments using ethidium bromide, propidim iodide, and fluorescent dyes.". Note that the examiner did not reject claim 8 that requires agarose

gel electrophoresis and claim 10 that requires ethidium bromide, propidim iodide, and fluorescent dyes.

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 5, 14, 15, 18, 23, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preston *et al.,* (1994) as applied to claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26 above, and further in view of Samadpour *et al.,* (J. Clin. Microbiol. 31, 3179-3183, December 1993) and in light of GIBCO BRL Catalog (1992, page 318).

The teaching of Preston *et al.,* have been summarized previously, supra.

Preston *et al.,* do not disclose: (1) *Escherichia coli* O157 isolates as described in claims 5 and 27; (2) using 5-30 μg of genomic DNA as described in claims 14 and 23; (3) agarose gel as described in claim 18; and (4) elimination of all DNA fragment less than 2 kb as described in claims 15 and 24.

Samadpour *et al.,* teach molecular epidemiology of *Escherichia coli* 0157: H7 strains by bacteriophage lambda restriction fragment length polymorphism analysis, which encompasses all limitations recited by claims 5, 14, 18, 23, and 27. In this study, genomic DNAs prepared from 168 isolates of *Escherichia coli* O157:H7 were digested with four different restriction enzymes

(EcoRI, HindIII, PstI, and PvuII), separated in 0.8% agarose gel (see page 3180, left column), and analyzed for restriction fragment length polymorphisms on Southern blots probed with bacteriophage lambda DNA. The isolates analyzed included strains from a recent large multistate outbreak of *E. coli* O157:H7 infection associated with consumption of poorly cooked beef in restaurants, a day-care center cluster, and temporally and geographically unrelated isolates. E. coli O157:H7 isolates recovered from the incriminated meat and from 61 of 63 patients (3/63 =4.8%) (considered as the lowest index of diversity from the unlinked panel) from Washington and Nevada possessed identical lambda restriction fragment length patterns. The lambda restriction fragment length polymorphisms observed in 11 of 12 day-care center patients were identical, but they differed from that of the strain associated with the multistate outbreak. E. coli O157:H7 from 42 patients temporally or geographically unrelated to either cluster of infection possessed 39 (40/42 =95.2%) unique and different lambda restriction fragment length patterns (considered as the highest index of diversity from the unlinked panel) (see abstract in page 3179 and left column in page 3182). Note that: (1) agarose gel used by Samadpour *et al.*,could separated fragment in the 0.1 to 18 kb range as described in claim 1 (see Figure 2 in page 3181) since the range of lambda markers digested by Hind III on the gel used in this reference (see lane 1) were from 0.125 kb to 23.13 kb (see GIBCO BRL Catalog, page 318, 1992); (2) although Samadpour *et al.,* did not show how much genomic DNA per each isolate was used for restriction digestion and how much genomic DNA per each isolate was loaded per lane in the gel as described claims 14 and 23, in the absence of convincing evidence to the contrary the claimed invention, it would have been *prima facie* obvious to one having ordinary skill in the art at the

time the invention was made to digest and load 10 μg genomic DNA since it was routine in the art to load 10 μg genomic DNA per lane for Southern Blot and (3) although Samadpour *et al.,* did not show to eliminate all DNA fragments less than 2 kb as described in claims 15 and 24, however, in the absence of an unexpected result, one having ordinary skill in the art at the time the invention was made would optimize experimental conditions to reach these goals since he or she stops electrophoresis in purpose after less than 2 kb DNA fragment have removed out of the gel.

Therefore, in the absence of an unexpected result, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to have analyzed bacteriophage lambda RFLP in *Escherichia coli* O157 strains by agarose gel and Southern Blot hybridization because: (1) Southern Blot provide another way to confirm the experimental results from RFLP analysis; (2) the simple substitution of one bacteria strain with known properties (*Shigella sonnei*) from another bacteria strain with known properties (*Escherichia coli* O157:H7), and the simple substitution of one well known gel separation (polyacrylamide gel) from another well known gel separation system (agarose gel) in RFLP analysis would have been, in the absence of an unexpected result, *prima facie* obvious to one having ordinary skill in the art at the time the invention was made.

Furthermore, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose. Support for making the obviousness rejection comes from the M.P.E.P. at 2144.07 and 2144.09.

Also note that there is no invention involved in combining old elements is such a manner that these elements perform in combination the same function as set forth in the prior art without giving unobvious or unexpected results. *In re Rose* 220 F.2d. 459, 105 USPQ 237 (CCPA 1955).

Response to Arguments

In page 10, third paragraph bridging to page 13, second paragraph of applicant's remarks, applicant argued that "[T]he is nothing in the Preston reference, alone or in view of Samadpour in combination that anticipates or makes obvious the methods described in the instant invention." since "the examiner lacks a basis to argue that the MRF method assumes a simple substitution of organism (E.coli instead of Shigella) and substitution of polyacrylamide with agarose. There is nothing in the references cited by the examiner to support this assertion or suggests this substitution.".

The argument has been fully considered but it is not persuasive toward the withdrawal of the rejection. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, since agarose and polyacrylamide gels are two common gels to separate nucleic acid fragments with a range of 0.1 to 18 kb, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected

functions to achieve their expected results when combined for their common known purpose. Therefore, the simple substitution of one well known gel separation (polyacrylamide gel) from another well known gel separation system (agarose gel). Since both *Shigella sonnei* and *Escherichia coli* O157:H7 are bacteria strains (structural similarity), the simple substitution of one bacteria strain with known properties from another bacteria strain with known properties.

10. Claims 7, 9, 10, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preston *et al.,* (1994) as applied to claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26 above, and further in view of Arakawa *et al.,* (J. Chromatography A, 664, 89-98, 1994).

The teaching of Preston *et al.,* have been summarized previously, supra.

Preston *et al.,* (1994) do not disclose to identify genetic subtypes among *Shigella sonnei* using capillary gel electrophoresis (3% polyacrylamide gel) as described in claims 7, 9, 10, 17, and 20.

Arakawa *et al.,* teach the detection of single base substitution in gene by capillary gel electrophoresis (see abstract in page 89). Note that Arakawa *et al.,* did not directly show to stain the gel with ethidium bromide as described in claims 10 and 20, however, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to stain DNA fragments with ethidium bromide since it was routine to UV detect DNA fragments stained with ethidium bromide on a gel (see page 91, right column, first paragraph).

Therefore, in the absence of an unexpected result, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to have

identified genetic subtypes among *Shigella sonnei* using capillary gel electrophoresis because the simple substitution of one well known gel separation system (regular polyacrylamide gel) from another well known gel separation system (capillary gel) in the separation of digested DNA fragments would have been, in the absence of an unexpected result, *prima facie* obvious to one having ordinary skill in the art at the time the invention was made.

Furthermore, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose. Support for making the obviousness rejection comes from the M.P.E.P. at 2144.07 and 2144.09.

Also note that there is no invention involved in combining old elements is such a manner that these elements perform in combination the same function as set forth in the prior art without giving unobvious or unexpected results. *In re Rose* 220 F.2d. 459, 105 USPQ 237 (CCPA 1955).

Response to Arguments

In page 13, last paragraph bridging to page 16, first paragraph of applicant's remarks, applicant argued that "there is no reason suggested in the reference themselves to make that suggested combination resulting in the instant invention" since (1) "[T]he instant invention does not claim nor describe the use of ethidium bromide and the UV light for detecting DNA fragments," and " [P]revious to the instant invention, it was impossible to generate and visualize chromosomal RFLP patterns in <18 kb size range using these stains"; (2) "[T]he applicant finds that polyacrylamide gel separation is necessary and not the same as capillary gel separation method."; and (3) "[T]he examiner lacks foundation to assume that capillary gel separation and

polyacrylamide gel separation methods are the same or behave identically because they are both well known.".

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. First, the instant invention did claim the use of ethidium bromide. It was well known in the art that nucleic acid fragments stained with ethidium bromide in the gel became visible under the UV light (see any kind of molecular biology book). Second, the examiner agreed with applicant that polyacrylamide gel separation was not the same as capillary gel separation method. Since both methods separated nucleic acid fragments with a range of 0.1 to 18 kb, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose. Therefore, simple substitution of one well known gel separation system (regular polyacrylamide gel) from another well known gel separation system (capillary gel) in the separation of digested DNA fragments would have been, in the absence of an unexpected result, *prima facie* obvious to one having ordinary skill in the art at the time the invention was made. Third, applicant did not provide an evidence why one having ordinary skill in the art at the time the invention was made could not use capillary gel instead of regular polyacrylamide gel to separate nucleic acid fragments.

11. Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preston *et al.,* (1994) as applied to claims 1-4, 6, 11, 12, 16, 19, 21, 25, and 26 above, and further in

view of Clayton *et al.,* (J. Clin. Microbiology, 31, 1420-1425, June, 1993) and Stratagene Catalogue (1994, page 211).

The teaching of Preston *et al.,* have been summarized previously, supra.

Preston *et al.,* (1994) do not disclose to analyze RFLP by double restriction digestion with two 6 base cutters as described in claim 13 or one 4 base cutter and one 6 base cutter as described in claim 22.

Clayton *et al.,* do teach to analyze RFLP by double restriction digestion with two 4 base cutters (see left column in page 1422, Figure 2 in page 1423, and Figure 3 in page 1424).

Stratagene Catalogue (1994) provides commercial available different restriction enzymes with 4 base and six base cutters (page 211).

Therefore, in the absence of an unexpected result, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to have analyzed RFLP by double restriction digestion with two 6 base cutters or one 4 base cutter and one 6 base cutter because: (1) restriction enzyme with 4 and 6 cutters are commercially available; (2) the simple substitution of one or two commercial available restriction enzymes from another one or two commercial available restriction enzymes in RFLP analysis would have been, in the absence of an unexpected result, *prima facie* obvious to one having ordinary skill in the art at the time the invention was made

Furthermore, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected functions to achieve their

expected results when combined for their common known purpose. Support for making the obviousness rejection comes from the M.P.E.P. at 2144.07 and 2144.09.

Also note that there is no invention involved in combining old elements is such a manner that these elements perform in combination the same function as set forth in the prior art without giving unobvious or unexpected results. *In re Rose* 220 F.2d. 459, 105 USPQ 237 (CCPA 1955).

Response to Arguments

In page 16, second paragraph bridging to page 17, first paragraph of applicant's remarks, applicant argued that "there is no reason suggested in the reference themselves to make that suggested combination resulting in the instant invention" since "[T]he use of at least two 6 base cutters for genomic DNA as a step in differentiating genetic sub-types within a population of genetically related organisms is not suggested, discussed nor anticipated by Clayton or Preston, alone or in combination.".

These arguments have been fully considered but they are not persuasive toward the withdrawal of the rejection. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Clayton *et al.,* teach to analyze RFLP by double restriction digestion with two 4 base cutters. Since different restriction enzymes with 4 base and

six base cutters are commercially available and double digestion of nucleic acid with restriction enzymes with two six base cutters was known in the art at the time the invention was made, the motivation to make the substitution cited above arises from the expectation that the prior art elements will perform their expected functions (double digestion) to achieve their expected results when combined for their common known purpose. Therefore, the simple substitution of one or two commercial available restriction enzymes from another one or two commercial available restriction enzymes in RFLP analysis would have been, in the absence of an unexpected result, *prima facie* obvious to one having ordinary skill in the art at the time the invention was made.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. No Claim is allowed.

14. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

Frank Lu
September 30, 2002

W. Gary Jones
Supervisory Patent Examiner
Technology Center 1600